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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,493	01/19/2005	Emil Edwin	613-91	8546
23117	7590	07/19/2005		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER WILSON, KATINA M	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/507,493

Applicant(s)

EDWIN ET AL.

Examiner

Katina M. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

On p. 5, the line of the "imaginary arc" (line 35) is not defined. In particular, the last 6 lines of p. 5 seem to suggest that only two (maybe three) *regions* define an arc, specifically the two guides and the detector. Yet, an arc requires at least three points (not vague regions). In addition, the phrase (approximately the same radius as the pipe" (lines 35-36) does not lend itself to defining the arc. What exactly defines the arc? Is it defined by the points (if there are any points) where the guides and detector actually contact the pipe? Is it defined by the rotational axes of the roller guides, and some point of the detector? This is problematic, as the arc will define the geometry of the claimed apparatus, and thus it is unexplained how to reconstruct the claimed apparatus. Also, is the "distance" (p. 6, line 5) a circumferential distance along the arc, or is it a straight line distance? What defines the path that provides for this "distance"?

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, what defines the "arc" and "distance"?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 8, 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Baresh et al 4240206.

As to claim 1, 11, and 12 Baresh et al teaches a detector/electromechanical probe 48a for detecting changes in a *radius* of a tube 90 and a plurality of guides/rod 50 and anvil 42a for guiding the probe along the tube in a direction parallel to the longitudinal axis of the tube, the rod and the anvil comprising rotatable members/roller 54b and 46a are spaced apart from the probe and arranged to contact a surface of the tube when the probe is in contact with the tube, wherein a said roller is provided on each side of the probe, the roller of the rod and anvil and the probe positioned along an arc, and the distance between each roller of the rod and anvil and the probe being smaller than the radius of the arc, whereby an output/display related to the deformation of the tube surface is derived from the output of the probe (figures 1, 4, and 5; col. 2 and col. 3, lines 1-29).

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Applicant discloses (page 2, line 37-page 3, line 1, 12-15) wheel 12 on an axle 13 forms a detector, detector section 3, therefore Baresh et al teaches the detector/probe 48 is in contact with the pipe/tube just as much as the applicant's detector touch/contacts the pipe. Furthermore, as best understood, Baresh et al teaches "the distance between each said rotatable member of the guide and the detector being smaller than the radius of the arc" just as much as the applicant, since the points for the *distance* is not disclosed in the specification to be from the axle point to axle point or guide wheel (where it makes contact with the pipe) to detector (where it makes contact with the pipe). The distance from the axle point to axle point will be different from guide wheel (where it makes contact with the pipe) to detector (where it makes contact with the pipe). Also, for the distance to be smaller than radius of the arc depends upon the size of the pipe if the size of the measuring apparatus is same, example1 if radius of the arc of the pipe is 20 and the distance between the wheel and the detector is 3 then the distance is smaller than the radius of the arc example 2 if the pipe is oblong the radius of the arc would depend on the location of the detector and wheels to determine if the distance is smaller than the radius of the arc of the pipe.

As to claim 5, Baresh et al shows the probe comprises rollers that are arranged to roll over the surface of the tube (figures 2-5).

As to claim 6, the hand held probe wherein the roller of the probe is movably mounted on housing/head 12 and each rod and anvil is mounted on an arm/part 14 and part 16 extending laterally from a portion of the head 12 when the parts are not joined together.

As to claim 8, the hand held probe unit 10 comprises a handle 58 to move probe along the tube (figures 2 and 3, col. 3, lines 30-34).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baresh et al in view of Patterson, Sr. et al 5623107.

As to claim 4, Baresh et al does not teach rod and/or anvil using magnets arranged to hold the probe in position against a *steel pipe*. However, Patterson, Sr. et al teaches an inspection device where the guide/trolley 1 with beam 2 uses magnetic wheel for attachment to a cylindrical surface. It would have been obvious to one skilled in the art at the time the invention was made to substitute Baresh et al roller with magnetic wheel for attachment to a cylindrical surface when the surface is a metal/steel (turbine rotor).

7. Claim 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baresh et al in view of Yoshida et al EP000282687A2.

Baresh et al does not teach the probe arrange to measure the distance traveled by the probe along the tube. However, Yoshida et al teaches a detector 28 with a traveling distance meter interlocked with the movement of the pig/probe when the detector is detecting any weld spot in a pipeline. It would have been obvious to one

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skilled in the art at the time of the invention to interlock the probe with a traveling distance meter to measure the traveling distance along a pipeline when detecting deformation/weld spots.

As to claim 10, neither Baresh et al nor Yoshida et al clearly teach the distance meter measures the traveling distance via rotation of the wheels/rollers, but the distance meter in its broadness interpretation include different types of meter may be applied. Therefore it would be obvious to one skilled in the art at the time the invention was made to use position meter/wheel rotation odometer to measure/count the revolution made by the wheel/roller to determine the distance travel.

Allowable Subject Matter


8. Claims 2-3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katina M. Wilson whose telephone number is 571-272-2209. The examiner can normally be reached on Mon-Fri 6:15am-4:00pm, off 1st Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL S. LARKIN
PRIMARY EXAMINER